EMS & Trauma Section
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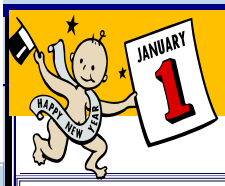
EMSC/CHILD READY CONNECTION *NEWSLETTER*



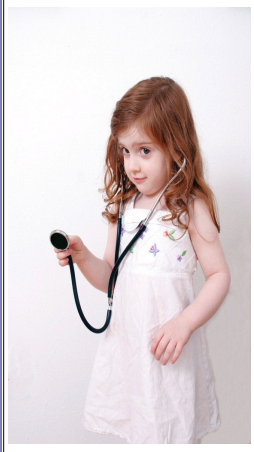
January 2015: VOLUME 3, ISSUE 1

A word from the EMSC Program Manager:

Greetings!

The Emergency Medical Services for Children (EMSC) Program aims to ensure that emergency medical care for the ill and injured child or adolescent is well integrated into an emergency medical service system.

We work to ensure that the system is backed by optimal resources and that the entire spectrum of emergency services (*prevention, emergency response, prehospital care, hospital care, interfacility transport, and rehabilitation)* is provided to children and adolescents, no matter where they live, attend school or travel.



Child Ready Montana– State Partnership of Regionalized Care (SPROC)

The intent of the program is to develop an accountable culturally component and assessable emergent care system for pediatric patients across Montana.

THE *RIGHT* CARE AT THE *RIGHT* PLACE AT THE *RIGHT* TIME WITH THE *RIGHT* RESOURCES!

Exciting news and events are going on this month!

Register for the free Pediatric Disaster Response and Emergency Preparedness – limited spaces– Course developed by the National Emergency Response and Rescue Training Center (see page 2).

See other free educational offerings & pediatric airway management information, See the National Assessment of Pediatric Educational top needs (see page 4.)

What are Teachable moments?-help increase safety of our kids (see page 5.)

WHO won the Pediatric Backboard? See page 7.

Have you seen the Medical Home Portal?? A great resource!

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MONTANA DPHHS Healthy People. Healthy Communities. Department of Public Health & Human Services

CHILD READY montana

EMS Montana Emergency Care

"Pediatric Disaster Response and Emergency Preparedness"

The Montana EMS for Children (EMSC) and Child Ready MT will host the new 16-hour course developed by the Texas A&M Engineering Extension Service and the National Emergency Response and Rescue Training Center (TEEX.)

DATE: June 18-19, 2015 in Billings, Montana (Course #: FPMGT439 27)

COURSE DESCRIPTION: This course prepares students to effectively, appropriately, and safely plan for and respond to a disaster incident involving children. The course addresses the specific needs of pediatric patients in the event of a community-based incident.

This is not a hands-on technical course, but instead a management resource course for stakeholders like pediatric physicians, emergency managers, emergency planners, and members of public emergency departments like EMS, Fire, Police, Public Health, and Hospitals in the field of disaster response and preparedness work.

PREREQUISITE: None. However, familiarity with the National Incident Management System (NIMS) and the Incident Command System (ICS) via completion of study courses IS-100, IS-200, IS-700, and IS-800 (or equivalents) is recommended.

TOPICS:
- Introduction to Pediatric Response
- Emergency Management (EM) Considerations
- Implications for Planning and Response
- Functional Access Needs Considerations
- Mass Sheltering
- Pediatric Triage
- Allocation of Scarce Resources
- Pediatric Reunification Considerations
- Pediatric Decontamination Considerations

AUDIENCE:
- Community and Hospital-based Emergency Managers
- EMS Personnel
- Hospital Administration and Emergency Room Personnel
- Public Safety/ Public Health Personnel
- School Administrators
- MRC Personnel
- Private Sector
- Law Enforcement
- Disaster Response/ Relief Personnel
- County, State, and Federal personnel who respond to a local jurisdiction disaster event response

REGISTRATION IS LIMITED TO 60 PARTICIPANTS. REGISTER NOW TO SAVE YOUR PLACE!
Registration form is located at: http://dphhs.mt.gov/publichealth/EMSTS/calendar.aspx

Submit the completed Registration Form to Robin Suzor, MT EMSC Program Manager, PO Box 202951, Helena MT 59620, or by fax to (406) 444-1814 Attn: Robin Suzor.

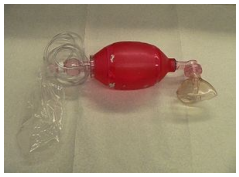
(If registrant is not a United States Citizen, the submission of a Foreign National Access Visitor Form will be necessary at least 100 days before the course start date.)

PEDIATRIC AIRWAY

A recent webinar with Ron M. Walls, MD, Ali S. Raja, MD, MBA, MPH and Cheryl Lynn Horton, MD, discussed the differences between pediatric and adult airways. Pediatric patients typically have a relatively large head; small nares; short neck; a large tongue relative to mouth size; the larynx is more cephalad in infants at C2 until it approaches that of the adult at C4; the epiglottis is long and angled, projecting above the glottis opening; and vocal cords are slanted anteriorly and rostrally.

Walls noted the child is the model of the difficult airway. In adult patients, difficult intubations often occur because of some combination of a small mouth and large tongue; that's exacerbated in children because those conditions are present along with the presentation of a higher glottis.

Horton offered the following helpful tips for managing the pediatric airway:



Bag mask ventilation

- Make sure the head is in a slightly extended position,
- Use an oral and/or nasopharyngeal airway to help displace the larger tongue and make BVM more effective,
- Use a "squeeze, release, release" technique to give the child adequate time to ventilate.

Preintubation

- Position the patient correctly, with a towel underneath the shoulders to align the axes,
- Preoxygenation is really important because children will desaturate rapidly,
- Prepare and select properly sized equipment for children-(Age + 16)/4 gives you the proper ET tube size,
- 3 x ET tube size gives you the proper depth.

Intubation

- Look up (anteriorly) in the patient and use a stylet.

The webinar presenters discussed how to handle a small child in respiratory distress who also happens to have Down syndrome. Horton said one thing that works well in Down syndrome children is nasal CPAP, which should be considered as an option, among other common options such as BVM, high-flow nasal cannula and others. Raja added that many children with Down syndrome are already used to wearing positive pressure ventilation at night because they have obstructive sleep apnea, especially as they get a little older, so nasal CPAP could be an easy option to use during transport.

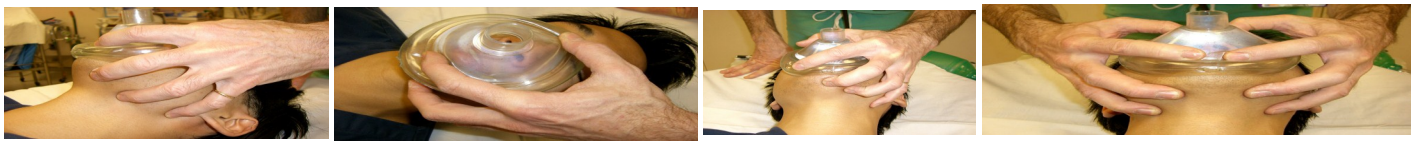
Horton noted that while congenital difficult airways are rare, they're scary. There are a number of congenital syndromes with varying features that make for a difficult airway, but common abnormalities include a small chin, large tongue, a small or limited mouth opening and a short or immobile neck. All of these can combine to make intubation very difficult in children with congenital syndromes. So, extra-or supraglottic devices may make more sense.

For more information see: http://www.emsworld.com/article/12010938/quarterly-airway-management-research-update

BVM IN THE PEDIATRIC POPULATION

The pediatric airway poses some important anatomical differences with regard to effective ventilation. Infants and young children have large occiputs compared to adults. This major difference causes more flexion of the neck when the patient is supine. Also, children have larger tongues which can cause airway obstruction. Extra care must be taken to achieve adequate positioning and relief of tongue obstruction with airway adjuncts. With regard to equipment, bags have smaller volumes for newborns and young children. **Mask sizes vary with children and it is important to choose an appropriately fitted mask.** Unlike the adult anatomic mask, a circular mask may be more suitable in infants and young children.

The rate of ventilation rate is different for the pediatric population: for infants, 20-30 breaths per minute; for older children, 16-20 breaths per minute. The tidal volume delivered to the child should be appropriate to see chest rise, and care should be taken to not over-ventilate the patient.



Strategies for Successful BVM Ventilation —Common pitfalls of BVM ventilation include inadequate positioning, improper mask holding, and failure to use an oral or nasal airway. Having a stepwise approach to performing and troubleshooting BVM ventilation will improve the likelihood of success. In addition, being familiar with the predictors of difficult BVM ventilation can help you anticipate problems.

The role of simulation is important for BVM ventilation. It has been shown that simulation of airway management can improve the effectiveness of a provider's technique in caring for patients.

As with any other procedure in emergency medicine, **practice is the key.**

CHILDREN'S SAFETY INITIATIVE: A NATIONAL ASSESSMENT OF PEDIATRIC EDUCATIONAL NEEDS AMONG EMS PROVIDERS

A recent study published in *Prehospital Emergency Care* identified the educational needs of EMS providers as it relates to pediatric care. Between August 2011 and July 2012, a three-phase Delphi survey of a national panel of pediatric prehospital providers and content experts was conducted. Study investigators recruited participants by e-mail various emergency physicians, EMS physicians, and EMS provider listservs. A total of 737 respondents were included in the first phase of the survey, including paramedics (50.8%), EMT-basics/ first responders (22%), and physicians (11.4%).

Investigators found that the leading areas of educational need were: pediatric airway management, responder anxiety when working with children, and general pediatric skills among providers. Additionally, the top three decision-making needs were: knowing when to alter plans mid-course, knowing when to perform advanced airway, and assessing pain in children. Lastly, the **primary needs in technical or procedural skills were: pediatric advanced airway, neonatal resuscitation, and intravenous/ intraosseous access.**

Investigators believe the study results will provide a foundation of information needs in the education of prehospital providers in the future.

* * * * * * * * * *

The MT EMSC is sponsoring Emergency Pediatric Care Training across the state. If you are interested in having a training, please contact Robin Suzor or Shari Graham at sgraham2@mt.gov for more information.

KNOW! TO SEIZE THE TEACHABLE MOMENT

Children are surrounded by alcohol and other drug-related messages on a regular and ongoing basis. The good news is, it is possible to turn these high-risk, harmful messages into positive lessons. When such an opportunity presents itself, you are encouraged to take hold and seize the Teachable Moment. Teachable moments help make unconscious messages conscious; provide an opportunity to reinforce your attitudes, values and expectations; and strengthen a child's low-risk attitudes and behaviors.

Jelly Belly Candy Company, makers of the world famous jelly beans, recently served up one of these teachable moment opportunities. Aside from their 50 official flavors, they have rookie flavors like Orange and Grape Crush and offer special edition packages featuring characters like Harry Potter, Hello Kitty and Mickey Mouse – which makes sense, as these treats, are a favorite among children of all ages. But recently they expanded their variety of alcohol-flavored beans, which already included flavors like peach Bellini, pomegranate cosmos, margarita and mojito. **The new flavor? *Draft Beer*, which the company proudly promotes as the world's first beer-flavored jelly bean, "with a jewel-like finish for a fresh from the tap 'bubbly' look."**

On the surface, alcohol-flavored candy like these may not seem like a huge deal. But think about it for a minute and realize the unconscious message being sent to our children. Those of us of a certain age may remember the bubble blowing pipes and candy cigarettes that allowed kids to imitate adult tobacco users. It was realized that such products desensitized children, leading some to become tobacco users later in life, and were removed from stores where children frequent.

Sadly, our children are growing up at a time when pop culture seems to be promoting and encouraging alcohol and other drug use more than ever, which in turn, desensitizes and normalizes these high-risk behaviors. **Toys R Us was recently guilty of playing into this when they made the decision to sell *Breaking Bad* action figures complete with detachable gun, cash and crystal meth**. Fortunately, Toys R Us pulled these "toys" from their shelves after a national outcry from parents.

So when you and your child see *Draft Beer Jelly Belly* jelly beans in the store, or a toy or game that promotes alcohol, tobacco or other drugs, or hear a song on the radio glamorizing use - see it as a prime opportunity to create a much-needed filter for your child and seize that Teachable Moment!

When utilizing a teachable moment, keep these tips in mind:

- Teachable moments work best when kept short and to the point;
- They are not effective in moments of anger or resentment between parent and child;
- The message will need to be revisited and repeated in order to inform, persuade and reinforce;
- Be mindful of your tone and choice of words - how you say it is as important as what you say

Keep it relevant and timely - take advantage of instances when a topic catches your child's attention. If you need more info, research and then revisit your chat (but do it sooner than later).

You are encouraged to use your parent or community leader power to take advantage of alcohol and other drug-related teachable moments. By doing so, you will help children develop critical communication skills so that he/she becomes more resistant to the power of the unconscious message.

Source: *Prevention Research Institute (adapted from): Teachable Moments: A Parent's Best Friend.*

CHILD READY MONTANA

Child Ready Montana is a State Partnership Regionalization of Care Grant (SPROC) funded by the Federal Health Resource and Services Administration (HRSA). Montana is one of 6 states to be awarded this grant with the Montana Emergency Medical Services for Children (EMSC) Program.

Please feel free to contact Kassie Runsabove Program Manager and Cultural Liaison to schedule Cultural Sensitivity presentations in your facility at (406)-238-6216 or Kassie.runsabove@sclhs.net.

Child Ready MT would like to highlight a resource for parents and physicians that help in the care of Children—**THE MEDICAL HOME PORTAL.**

The Medical Home Portal aims to provide ready access to reliable and useful information for professionals and families to help them care and advocate for children with special health care needs (CSHCN), as partners in the Medical Home model. The long-range goal is to improve outcomes for CSHCN and their families by enhancing the availability and quality of healthcare, related services, and coordination of care.

The premises behind the Portal's development include:

Most chronic conditions are uncommon or rare - for many diagnoses, primary care physicians are likely to have only one, or a few, patients;

The cumulative prevalence of chronic conditions however is substantial - 13.9% of children meet criteria for classification as children with special health care needs (CSHCN) (see the diagnosis prevalence list);

Maintaining current knowledge of medical information and community resources for each of these conditions is impossible;

Families of CSHCN are motivated and may have more time than physicians to devote to learning about their child's condition and to finding resources;

Families will soon learn to understand relatively technical language and will be better able to understand and communicate with professionals when they do;

Numerous other professionals (therapists, dentists, care coordinators, educators, pediatric and adult sub-specialists, etc.) could also benefit from information about various aspects of caring for CSHCN;

Physicians and Families working together as partners in the Medical Home model will be best able to improve outcomes for CSHCN.

The Portal currently (January 2013) contains over 500 pages of content and resources,

over 3800 links to other reliable and valuable web sites or downloadable information,

over 2400 citations of scientific and other expert literature to provide users with the evidence behind recommendations or to explore topics in greater depth

Though developed in and for Utah, the Portal was reprogrammed, with support from a National Library of Medicine grant (1 G08 LM007680-01A2), to enable sharing its content with other states and regions around the country. The reprogramming takes advantage of a native XML environment and makes it possible to substitute another state/region's local services data so that it will be integrated into the content and available for browsing/searching.

They are very interested in hearing from states or regions that would like to partner with them to offer this service for their families and professionals.

http://mt.medicalhomeportal.org/

DECEMBER TRIVIA WINNERS: PARADISE VALLEY FIRE & EMS!!

Thank you Paradise Valley!

The Montana Asthma Control Program provides a free training with CE to a hospital that wants to participate. They have space for one more hospital to receive a $5,000 grant. The Program is willing to offer the program for training purposes. They also train on spirometry use, for free but without CE. Contact Anna von Gohren at avongohren@mt.gov or (406) 444-7304 for more information.

FEMA'S "READY KIDS" SITE OFFERS RESOURCES AIMED AT YOUTH PREPAREDNESS

In case you haven't seen it, the Federal Emergency Management Agency (FEMA) has great online resources for kids, parents, and educators on emergency preparedness at http://www.ready.gov/kids. The newest edition is an entertaining 60 sec video created by the Ad Council - "Big Hero 6" based on characters of the Walt Disney hit movie to inspire them to be a hero and get prepared.

Free Violence Prevention Course--*Principles of Prevention*

Each year, more than 54,000 people lose their lives to violence. In addition to the tremendous physical and emotional toll, violence has substantial medical, lost productivity, and other costs. In 2000, these totaled more than $70 billion in the United States. The figure grows when we add criminal justice system costs, social services, and other expenses.

As Dr. Howard Spivak, director of CDC's Division of Violence Prevention, says, "Violence isn't something that just happens that you can't do anything about. It can be prevented."

One way CDC is helping the nation prevent violence is a free online training that's available 24 hours a day, seven days a week. It's called *Principles of Prevention*. The training offers continuing education credits through CDC—teaches the: Key concepts of primary prevention, Public health approach, and Social-ecological model. Participants complete interactive exercises to learn to help prevent five types of violence:

Child abuse and neglect **Intimate partner violence** **Sexual violence** **Suicide**

Youth violence.

Principles of Prevention is designed for those working to stop violence from ever happening. It helps professionals move from the problem to the solution. This course teaches the fundamentals of effective violence prevention methods and incorporates the growing body of research on what works. The Principles of Prevention course includes:

√ Interviews with leading experts in the field,
√ Dynamic graphics,
√ Interactive exercises, and
√ Compelling storytelling that makes the case for violence prevention.

http://www.childrenssafetynetwork.org/news/free-violence-prevention-course-cdc

THE AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (AHRQ) HAS RELEASED ITS NEWEST EFFECTIVE HEALTH CARE PROGRAM COURSE,

"CHILD EXPOSURE TO TRAUMA: COMPARATIVE EFFECTIVENESS OF INTERVENTIONS ADDRESSING MALTREATMENT."

The course summarizes evidence for interventions addressing maltreatment among children exposed to trauma. The overall purpose is to inform learners about the comparative effectiveness of parenting interventions, and trauma-focused treatments targeting children 14 years of age and younger.

Credit Available

- **Certified Health Education Specialists – maximum of 1.0 contact hours**
- **Nurse Practitioners — maximum of 1.0 contact hours**
- **Registered Nurses – maximum of 1.0 contact hours**
- **Pharmacists – maximum of 1.0 contact hours**
- **Physicians – maximum of *1.0 AMA PRA Category 1 Credit***

http://ahrq.cmeuniversity.com/course/disclaimer/110307

TRIVIA CONTEST:

First 3 to answer the questions wins a free Emergency & Critical Care Pocket Guide (BLS or ALS) Email rsuzor@mt.gov)

1. What is the newest flavor of jelly beans?
2. What is one common pitfall in BVM ventilation?
3. What is a leading need in pediatric education?
4. What is EPC?

TRAINING RESOURCES:

The Emergency Medical Services for Children (EMSC) Program is pleased to announce the release of the ***Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Preparedness Policies*** *created by a multidisciplinary workgroup of pediatric and disaster preparedness experts from across the country as a result of findings from the National Pediatric Readiness Project; data reported indicated that less than half of all U.S. hospitals reported having written disaster plans addressing issues specific to the care of children.*

The Checklist is a tool to help hospitals incorporate essential pediatric considerations into existing hospital disaster policies. It consists of 10 essential pediatric domains and corresponding considerations to guide hospital administrators, clinical managers, and disaster planning committees through a review of current disaster plans and inform policy development or revision. Additionally, a list of references and resources specific to each domain is provided to assist users in finding relevant literature and best practices.

The Checklist is available in both interactive and static (printable) pdf versions from the following websites:

Emergency Medical Services for Children (EMSC) National Resource Center (NRC)

http://www.emscnrc.org

National Pediatric Readiness Project

http://www.pediatricreadiness.org

Health Resources on Children in Disasters and Emergencies

http://disasterinfo.nlm.nih.gov/dimrc/children.html

EMSC ONLINE TRAINING PORTAL

The EMSC National Resource Center's (NRC) new website features an Online Training Portal. These flexible, pediatric-focused trainings are convenient and available 24 hours a day to meet the participant's lifestyle. In general, the courses are all self-paced and should take approximately 30 to 90 minutes to complete, depending on the course selected. Participants may enter and exit a course at any time, then re-enter to complete the course at their convenience. Many of the courses offer continuing education credit.

A variety of courses are available targeting EMS Professionals, Acute Care Professionals, Residents and Fellows, School Nurses, and Family and Caregivers. Check it out today!